



Mr. John M. Svoboda

## Mr. John M. Svoboda

*Accomplished research in electromagnetics, instrumentation, and data acquisition and control systems*

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**Education:** Mr. John M. Svoboda received a BS in electrical and computer engineering from Oregon State University during 1975.

**Work experience:** Mr. Svoboda spent three years working in the pulp and paper industry designing instrumentation and control systems. During 1979

he joined the Idaho National Engineering Laboratory, where he works for the Advanced Information and Communication Systems Department. He holds five patents. Much of his work experience centers on electromagnetics, instrumentation, and data acquisition and control systems as applied to nuclear reactors, nuclear waste site characterization, agriculture and subsurface science. Work in the area of electromagnetics includes complex dielectric measurements in the microwave spectrum, electronic control system susceptibility to electromagnetic energy, and magnetic field shield room design.

**Professional endeavors:** Mr. Svoboda's current research activities are directed at combining electrical resistivity tomography and magnetometric resistivity into one method capable of enhancing three-dimensional subsurface conductivity distribution mapping and subsurface inductively coupled sensor platform design.

### Patents:

U.S. Patent No. 5,907,111 -- Remotely Controlled Sensor Apparatus for use in Dig-Face Characterization System

U.S. Patent No. 6,462,562 -- Differential Capacitance Probe for Process Control Involving Aqueous Dielectric Fluids

U.S. Patent No. 6,497,153 -- Measuring Spatial Variability in Soil Characteristics

U.S. Patent No. 6,386,128 -- Methods and Systems for Seed Planting Management and Control

U.S. Patent No. 6,591,145 -- Systems and Methods for Autonomously Controlling Agricultural Machinery

### Licensing information

For information on licensing INEEL technologies such as those developed by Mr. Svoboda, contact Technology Outreach Account Executive:

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